



STIC Search Report

EIC 1700

STIC Database Tracking Number: 200776

**TO: Kuo-Liang Peng
Location: REM 10A71
Art Unit : 1712
September 7, 2006**

Case Serial Number: 10/722406

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Location: EIC 1700
REMSSEN 4B28
Phone: 571/272-2505
Kathleen.Fuller@uspto.gov**

Search Notes

=> FILE REG

FILE 'REGISTRY' ENTERED AT 17:32:11 ON 07 SEP 2006
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=> D QUE L36

L3	1 SEA FILE=REGISTRY ABB=ON	496-15-1
L5	1 SEA FILE=REGISTRY ABB=ON	288-32-4
L7	1 SEA FILE=REGISTRY ABB=ON	INDAZOLE/CN
L9	1 SEA FILE=REGISTRY ABB=ON	BENZOXAZOLE/CN
L11	1 SEA FILE=REGISTRY ABB=ON	1215-59-4
L12	1 SEA FILE=REGISTRY ABB=ON	271-58-9
L13	1 SEA FILE=REGISTRY ABB=ON	"2,1-BENZISOXAZOLE"/CN
L14	1 SEA FILE=REGISTRY ABB=ON	274-09-9

L15 1 SEA FILE=REGISTRY ABB=ON 59-49-4
L16 8 SEA FILE=REGISTRY ABB=ON L3 OR L5 OR L7 OR L9 OR L11 OR L12
OR (L13 OR L14 OR L15)
L17 1 SEA FILE=REGISTRY ABB=ON 271-95-4
L18 9 SEA FILE=REGISTRY ABB=ON L16 OR L17
L21 20541 SEA FILE=HCAPLUS ABB=ON L18
L22 236 SEA FILE=HCAPLUS ABB=ON L21 AND ?SILOXANE?
L23 4 SEA FILE=HCAPLUS ABB=ON L22 AND (PT OR PLATINUM) (5A) (CATALYST?
OR CAT/RL)
L24 673417 SEA FILE=REGISTRY ABB=ON ((SI(L)C(L)H(L)O))/ELS
L25 72072 SEA FILE=REGISTRY ABB=ON L24 AND PMS/CI
L26 68089 SEA FILE=HCAPLUS ABB=ON L25
L27 110 SEA FILE=HCAPLUS ABB=ON L26 AND L21
L28 1655 SEA FILE=HCAPLUS ABB=ON L25 AND (PT OR PLATINUM) (5A) (CATALYST?
OR CAT/RL)
L29 4 SEA FILE=HCAPLUS ABB=ON L28 AND L27
L30 5 SEA FILE=HCAPLUS ABB=ON L23 OR L29
L32 102 SEA FILE=HCAPLUS ABB=ON L21 AND ?SILICONE?
L33 4 SEA FILE=HCAPLUS ABB=ON L32 AND (PT OR PLATINUM) (5A) (CATALYST?
OR CAT/RL)
L34 5 SEA FILE=HCAPLUS ABB=ON L30 OR L33
L35 8 SEA FILE=HCAPLUS ABB=ON (L32 OR L22 OR L27) AND ?ALKENYL?
L36 12 SEA FILE=HCAPLUS ABB=ON L34 OR L35

=> D L36 BIB ABS IND/HITSTR 1-12

L36 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2005:824467 HCAPLUS
DN 143:232452
TI High efficiency polyalkylene glycol lubricants for use in worm gears
IN Carey, James Thomas; Prendergast, David K.; Buzdygon, Kevin J.
PA USA
SO U.S. Pat. Appl. Publ., 6 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2005181958	A1	20050818	US 2005-45755	20050128
	WO 2005080535	A1	20050901	WO 2005-US4384	20050211
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
PRAI	US 2004-544704P	P	20040213		
	US 2005-45755	A	20050128		
OS	MARPAT 143:232452				
AB	A polyalkylene glycol based lubricant composition that contains specified rust inhibitors and antioxidants has lowered operating temperature and is particularly suitable for use in worm drive gearboxes. The rust inhibitors consist of an N-acylo arcocine and an imidazole while the				

antioxidant consists of an alkylated di-Ph amine and a hindered phenol.

IC ICM C10M141-06
ICS C10M141-10

INCL 508280000; 508283000; 508514000; 508478000

CC 51-8 (Fossil Fuels, Derivatives, and Related Products)

ST polyalkylene glycol lubricant gear oil additive antiwear antioxidant
antirust; lubricant additive hindered phenol sarcosine deriv diphenylamine
triphenyl phosphorothioate; acylated aminoacetic acid polyalkylene
lubricant additive tolyltriazine imidazole deriv

IT Passivation
(agent additives for; high efficiency polyalkylene glycol lubricants
for use in worm gears)

IT Lubricating oil additives
(antioxidants; high efficiency polyalkylene glycol lubricants for use
in worm gears)

IT Lubricating oil additives
(antiwear; high efficiency polyalkylene glycol lubricants for use in
worm gears)

IT Lubricating oils
(base oils, synthetic; high efficiency polyalkylene glycol lubricants
for use in worm gears)

IT Polyoxyalkylenes, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(base oils; high efficiency polyalkylene glycol lubricants for use in
worm gears)

IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)
(defoamer; high efficiency polyalkylene glycol lubricants for use in
worm gears)

IT Lubricating oils
(gear oils, for worm gears; high efficiency polyalkylene glycol
lubricants for use in worm gears)

IT Phenols, uses
RL: MOA (Modifier or additive use); USES (Uses)
(hindered, polyoxyalkylene and alkylene diester diols; high efficiency
polyalkylene glycol lubricants for use in worm gears)

IT Temperature
(of gear operation, oil formulation effect on; high efficiency
polyalkylene glycol lubricants for use in worm gears)

IT Lubricating oil additives
(rust inhibitors; high efficiency polyalkylene glycol lubricants for
use in worm gears)

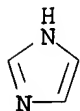
IT 107-97-1D, 1-oxo-C10-C30 alkyl and 1-oxo-C10-C30 alkenyl derivs.
110-25-8, Sarkosyl-O 122-39-4D, Diphenyl amine, C2-C20 dialkyl derivs.
288-32-4D, Imidazole, 2-C10-C30 alkyl, 1-C1-C6 hydroxyalkyl
derivs. 597-82-0, O,O,O-Triphenyl phosphorothioate 597-82-0D,
O,O,O-Triphenyl phosphorothioate, trialkylphenyl ester derivs.
21652-27-7, Amine-O 29385-43-1D, Tolyltriazole, 1-(di-branched C2-C20
alkyl)aminomethyl derivs. 88797-00-6 100041-12-1, Irganox L 57
RL: MOA (Modifier or additive use); USES (Uses)
(high efficiency polyalkylene glycol lubricants for use in worm gears)

IT 862582-69-2, Synalox 40D3001 862582-70-5, Synalox 40D700
RL: TEM (Technical or engineered material use); USES (Uses)
(high efficiency polyalkylene glycol lubricants for use in worm gears)

IT 288-32-4D, Imidazole, 2-C10-C30 alkyl, 1-C1-C6 hydroxyalkyl
derivs.
RL: MOA (Modifier or additive use); USES (Uses)
(high efficiency polyalkylene glycol lubricants for use in worm gears)

RN 288-32-4 HCAPLUS

CN 1H-Imidazole (9CI) (CA INDEX NAME)



L36 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:521420 HCAPLUS

DN 143:214245

TI Inorganic-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxy silanes

AU Jacob, Stephane; Poinsignon, Christiane; Popall, Michael

CS Fraunhofer Institut fuer Silicatforschung, Wuerzburg, D-97082, Germany

SO Electrochimica Acta (2005), 50(19), 4022-4028

CODEN: ELCAAV; ISSN: 0013-4686

PB Elsevier B.V.

DT Journal

LA English

AB A new class of proton conducting inorg.-organic polymer (ORMOCER) electrolytes for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxy silanes was developed by S. Jacob et. al. (2003). Different synthesis processes are used to take account of the different acidities of the starting alkoxides. System-I is based on the sep. hydrolysis and condensation of the acid and basic alkoxy silanes. Sulfonated alkoxy silanes and a styrene derivative functionalized alkoxy silane are hydrolyzed and co-condensed in parallel to the alkoxy silane containing at least a nitrogen heterocycle, an amine group or a sulfonamide group and a styrene derivative functionalized alkoxy silane. The two polycondensates are then mixed; the resulting resins are shaped into thin films and organically cross-linked via UV and/or thermal curing. Improvements of mech. and electrochem. properties lead to System-II in which the sulfonated functionalized alkoxy silane is 1st hydrolyzed and condensed, then the two other alkoxy silanes are added for co-condensation. In system-III the three alkoxy silanes used for system-I are hydrolyzed and co-condensed without any partial hydrolysis of one of the components. The three systems present a good thermal stability up to 180°. The conductivity of the materials shows an Arrhenius behavior in the temperature range

25-110° with activation energies of 0.45 up to 0.78 eV depending on sample composition. A 1.0×10^{-2} S cm⁻¹ conductivity value was measured for system-II/imidazole membranes at 110° under an inert gas atmosphere. The conductivity of anhydrous system-III/imidazole membranes goes from 9.1×10^{-3} S cm⁻¹ at 100° to $2.0 \times 10^{-2} \pm 1.5 \times 10^{-3}$ S cm⁻¹ at 140 °C.

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
Section cross-reference(s): 35, 38, 76

ST inorg hybrid polymer electrolyte membrane fuel cell polysiloxane deriv; linked sulfonyl styrene functionalized alkoxy silane polymer polyelectrolyte

IT Silanes

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (alkoxy, alkenyl, sulfonic-acid functionalized, copolymers with p-vinylphenylmethyldiethoxysilane and N-(3-Triethoxysilylpropyl)-4,5-dihydroimidazole, plain and block graft; inorg.-organic hybrid protonic polymeric materials for fuel cells)

IT Silanes

- RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(alkoxy, **alkenyl**, sulfonic-acid functionalized; inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT Silanes
RL: RCT (Reactant); RACT (Reactant or reagent)
(alkoxy, aromatic, and heterocyclic; inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT **Polysiloxanes**, preparation
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(aromatic, imidazole-functionalized; inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT Condensation reaction
Fuel cell electrolytes
Hybrid organic-inorganic materials
Hydrolysis
Polyelectrolytes
(inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT Crosslinking
(of styrene-functionalized **polysiloxane**; inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT **Polysiloxanes**, preparation
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(polystyrene-, graft, imidazole-Pr functionalized, block, neat and blends with imidazole; inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT Ionic conductivity
(proton; inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT 288-32-4, Imidazole, uses
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process); USES (Uses)
(blends with hybrid copolymers; inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT 5990-80-7P, p-Vinylphenylmethyldiethoxysilane 58068-97-6P, N-(3-Triethoxysilylpropyl)-4,5-dihydroimidazole 260785-03-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(inorg.-organic hybrid protonic polymeric materials for fuel cells based on polycondensed and organically cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)
- IT 5990-80-7DP, p-Vinylphenylmethyldiethoxysilane, copolymers with N-(3-Triethoxysilylpropyl)-4,5-dihydroimidazole and sulfonated **alkenylalkoxysilanes**, plain and block graft 58068-97-6DP, N-(3-Triethoxysilylpropyl)-4,5-dihydroimidazole, copolymers with p-vinylphenylmethyldiethoxysilane and sulfonated **alkenylalkoxysilanes**, plain and block graft

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(plain and blends with hybrid copolymers; inorg.-organic hybrid protonic
polymeric materials for fuel cells based on polycondensed and
organically cross-linked sulfonyl- and styrene-functionalized
alkoxysilanes)

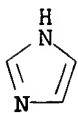
IT 288-32-4, Imidazole, uses

RL: DEV (Device component use); PEP (Physical, engineering or chemical
process); PYP (Physical process); PROC (Process); USES (Uses)

(blends with hybrid copolymers; inorg.-organic hybrid protonic polymeric
materials for fuel cells based on polycondensed and organically
cross-linked sulfonyl- and styrene-functionalized alkoxysilanes)

RN 288-32-4 HCAPLUS

CN 1H-Imidazole (9CI) (CA INDEX NAME)



IT 260785-03-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(inorg.-organic hybrid protonic polymeric materials for fuel cells based
on polycondensed and organically cross-linked sulfonyl- and
styrene-functionalized alkoxysilanes)

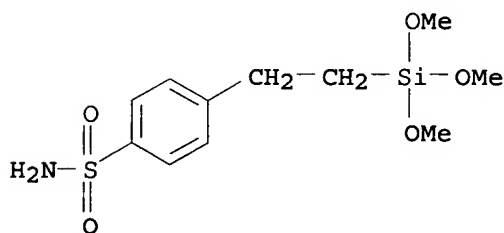
RN 260785-03-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 3-(trimethoxysilyl)propyl ester, polymer with
trimethoxy[3-(oxiranylmethoxy)propyl]silane, 4-[2-
(trimethoxysilyl)ethyl]benzenesulfonamide and 4-[2-
(trimethoxysilyl)ethyl]benzenesulfonic acid (9CI) (CA INDEX NAME)

CM 1

CRN 260785-00-0

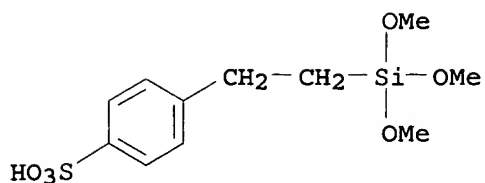
CMF C11 H19 N O5 S Si



CM 2

CRN 58556-70-0

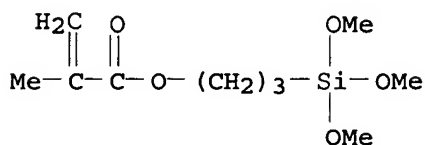
CMF C11 H18 O6 S Si



CM 3

CRN 2530-85-0

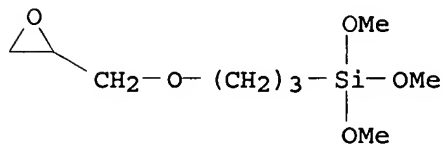
CMF C10 H20 O5 Si



CM 4

CRN 2530-83-8

CMF C9 H20 O5 Si



RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 3 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2005:468598 HCAPLUS

DN 143:34879

TI Electroluminescent devices having pendant naphthylanthracene-based polymers

IN Zheng, Shiyang; Vaeth, Kathleen M.

PA Eastman Kodak Company, USA

SO U.S., 30 pp.

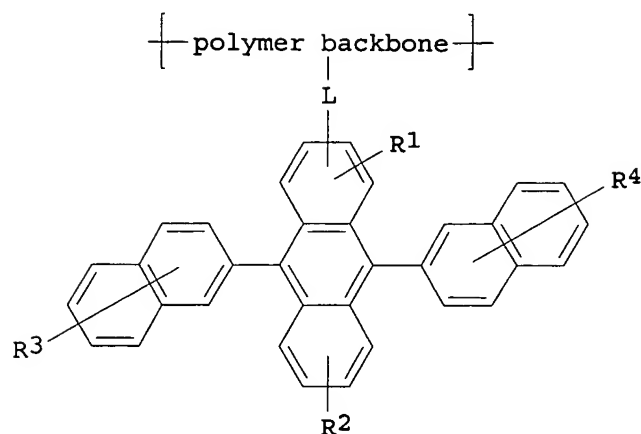
CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6899963	B1	20050531	US 2004-786812	20040225
PRAI	US 2004-786812		20040225		
GI					



AB An electroluminescent device includes an anode, a spaced-apart cathode, and polymer luminescent materials disposed between the anode and cathode, the polymeric luminescent materials includes pendant, 9,10-di-(2-naphthyl)anthracene-based polymers I [R1-4 = H, F, Cl, Br, cyano, nitro, C1-40 alkyl, **alkenyl**, alkynyl, alkoxy, or amino, or C6-30 aryl; L = a direct bond or a C0- 40 C or non-C linking group].

IC ICM H05B033-14

INCL 428690000; 428917000; 313504000; 313506000; 427066000

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 38

ST electroluminescent device pendant naphthyl anthracene polymer

IT Electroluminescent devices
(electroluminescent devices having pendant naphthylanthracene-based polymers)

IT 852615-85-1P **852615-86-2P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(electroluminescent devices having pendant naphthylanthracene-based polymers)

IT 84-60-6, 2,6-Dihydroxyanthraquinone 100-39-0, Benzylbromide **288-32-4**, Imidazole, reactions 15231-91-1, 2-Bromo-6-hydroxynaphthalene 18162-48-6, tert-Butyldimethylchlorosilane 18908-66-2, 2-Ethylhexyl bromide 852615-84-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(electroluminescent devices having pendant naphthylanthracene-based polymers)

IT 100751-65-3P 332083-42-8P 337369-35-4P 852615-81-7P 852615-82-8P 852615-83-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(electroluminescent devices having pendant naphthylanthracene-based polymers)

IT **852615-86-2P**
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(electroluminescent devices having pendant naphthylanthracene-based polymers)

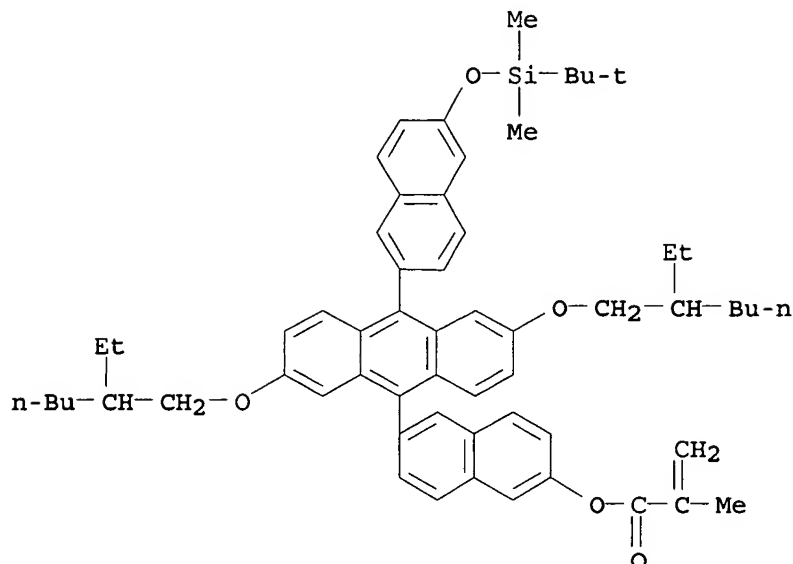
RN 852615-86-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 6-[10-[6-[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-naphthalenyl]-2,6-bis[(2-ethylhexyl)oxy]-9-anthracenyl]-2-naphthalenyl ester, homopolymer (9CI) (CA INDEX NAME)

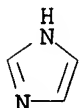
CM 1

CRN 852615-82-8

CMF C60 H72 O5 Si



IT 288-32-4, Imidazole, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (electroluminescent devices having pendant naphthylanthracene-based polymers)
 RN 288-32-4 HCAPLUS
 CN 1H-Imidazole (9CI) (CA INDEX NAME)

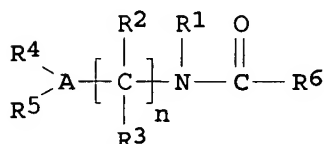


RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

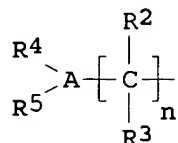
L36 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:550765 HCAPLUS
 DN 141:89546
 TI Tertiary amino alkyl amide catalysts for improving physical properties of polyurethane foams
 IN Burdeniuc, Juan Jesus
 PA Air Products and Chemicals, Inc., USA
 SO U.S. Pat. Appl. Publ., 12 pp., Cont.-in-part of U.S. Ser. No. 336,555.
 CODEN: USXXCO
 DT Patent
 LA English
 FAN.CNT 8

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 2004132850	A1	20040708	US 2003-724887	20031202
	US 6835757	B2	20041228		
	US 6737446	B1	20040518	US 2003-336555	20030103
	JP 2004211093	A2	20040729	JP 2003-432218	20031226
	EP 1435365	A2	20040707	EP 2003-29981	20031230
	EP 1435365	A3	20051123		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	CN 1515601	A	20040728	CN 2003-10124049	20031231
	KR 2004062884	A	20040709	KR 2004-39	20040102
PRAI	US 2003-336555	A2	20030103		
	US 2003-336371	A	20030103		
	US 2003-338184	A	20030106		
	US 2003-724887	A	20031202		
OS	MARPAT 141:89546				
GI					



I



II

AB Polyurethane foam was prepared by treating an organic polyisocyanate and a polyol in the presence of water as a blowing agent, a cell stabilizer, a gelling catalyst, a blowing catalyst, and a tertiary amino alkyl amide catalyst composition I (A = CH, N; R1 = H, II; R2, R3 = H, C1-6 linear or branched alkyl; R4, R5 = C1-6 linear or branched alkyl, C2-5 alkylene; R6 = C5-35 linear or branched alkyl, **alkenyl**, aryl; n = 1-3). Thus, 83.8 parts 3-dimethylaminopropylamine was reacted with 210 parts acetic acid to form 118 parts N-(3-dimethylaminopropyl)acetamide, which is used as catalyst for producing polyurethane foam.

IC ICM C08G018-00

INCL 521155000

CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 38

ST polyurethane foam tertiary aminoalkyl amide polymn catalyst

IT **Polysiloxanes**, uses

RL: MOA (Modifier or additive use); USES (Uses)

(Dabco DC 5043; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)

IT Fatty acids, preparation

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(coco, reaction products with dimethylaminopropylamine; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)

IT Polyurethanes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(foams; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)

IT Amines, uses

RL: CAT (Catalyst use); USES (Uses)

(polyamines, nonpolymeric, permethylated or alkoxyated, blowing catalysts; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)

IT Fatty acids, preparation
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)
 (tall-oil, reaction products with dimethylaminopropylamine; tertiary
 amino alkyl amide catalysts for improving phys. properties of
 polyurethane foams)

IT Blowing agents
 Polymerization catalysts
 (tertiary amino alkyl amide catalysts for improving phys. properties of
 polyurethane foams)

IT Plastic foams
 RL: TEM (Technical or engineered material use); USES (Uses)
 (tertiary amino alkyl amide catalysts for improving phys. properties of
 polyurethane foams)

IT 7732-18-5, Water, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (blowing agent; tertiary amino alkyl amide catalysts for improving
 phys. properties of polyurethane foams)

IT 288-32-4D, Imidazole, complexes with boron 3030-47-5,
 Pentamethyldiethylenetriamine 3033-62-3, Bisdimethyl aminoethyl ether
 7440-42-8D, Boron, complexes with imidazole 83016-70-0, Texacat ZF 10
 714959-62-3
 RL: CAT (Catalyst use); USES (Uses)
 (blowing catalyst; tertiary amino alkyl amide catalysts for improving
 phys. properties of polyurethane foams)

IT 100-76-5D, Quinuclidine, derivs. 123-75-1D, Pyrrolidine, derivs.
 280-57-9, 1,4-Diazabicyclo[2.2.2]octane 643-20-9D, Pyrrolizidine,
 derivs. 497085-84-4, Dabco NE 1060
 RL: CAT (Catalyst use); USES (Uses)
 (gelling catalyst; tertiary amino alkyl amide catalysts for improving
 phys. properties of polyurethane foams)

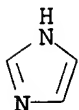
IT 64-18-6, Formic acid, reactions 64-19-7, Acetic acid, reactions
 109-55-7, 3-Dimethylaminopropylamine 143-07-7, Lauric acid, reactions
 149-57-5, 2-Ethylhexanoic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; preparation of tertiary amino alkyl amide catalysts for
 improving phys. properties of polyurethane foams)

IT 109-55-7DP, 3-Dimethylaminopropylamine, reaction products with fatty acids
 3179-80-4P 3197-19-1P 5922-69-0P 6325-18-4P
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);
 USES (Uses)
 (tertiary amino alkyl amide catalysts for improving phys. properties of
 polyurethane foams)

IT 319482-44-5P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM
 (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (tertiary amino alkyl amide catalysts for improving phys. properties of
 polyurethane foams)

IT 288-32-4D, Imidazole, complexes with boron
 RL: CAT (Catalyst use); USES (Uses)
 (blowing catalyst; tertiary amino alkyl amide catalysts for improving
 phys. properties of polyurethane foams)

RN 288-32-4 HCAPLUS
 CN 1H-Imidazole (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2004:546515 HCAPLUS
DN 141:106892
TI Process for the production of hydrocarbylsilyl carboxylate compounds
IN Plehiers, Mark
PA Sigma Coatings B.V., Neth.
SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004056837	A1	20040708	WO 2003-EP13889	20031208
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003288241	A1	20040714	AU 2003-288241	20031208
	EP 1572701	A1	20050914	EP 2003-780137	20031208
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2006510690	T2	20060330	JP 2004-561241	20031208
	US 2005222446	A1	20051006	US 2005-508219	20050404
PRAI	EP 2002-258931	A	20021220		
	WO 2003-EP13889	W	20031208		
OS	MARPAT 141:106892				
AB	R6CO2(SiR4R5O)nSiR1R2R3 [R4, R5 = OH, alkyl, aryl, alkoxy, aryloxy, OSiR1R2R3, O(SiR4R5O)nSiR1R2R3, OCOR6, alkenyl , alkynyl, aralkyl, or aralkoxy, optionally substituted by ≥1 of alkyl, alkoxy, aralkyl, aralkoxy, OH, aryl, aryloxy, silyl, OSiR1R2R3, O(SiR4R5O)nSiR1R2R3, halo, amino, or aminoalkyl; R1, R2, R3 = H, OH, alkyl, aryl, alkoxy, aryloxy, OSiR1R2R3, O(SiR4R5O)nSiR1R2R3, OCOR6, alkenyl , alkynyl, aralkyl, or aralkoxy, optionally substituted by ≥1 of alkyl, alkoxy, aralkyl, aralkoxy, OH, aryl, aryloxy, silyl, OSiR1R2R3, O(SiR4R5O)nSiR1R2R3, halo, amino, or aminoalkyl; R6 = H, R8pCO2R9, alkyl, aryl, alkenyl , alkynyl, aralkyl, optionally substituted by ≥1 of alkyl, alkenyl , alkynyl, aralkyl, aryl, halo, amino, or aminoalkyl; p = 0 or 1; when p = 1, R8 = alkyl, alkenyl , alkynyl, aryl, aralkyl, aryl, OH, halo, amino, or aminoalkyl; R9 = H, alkyl, alkenyl , alkynyl, aryl, aralkyl, SiR1R2R3, or O(SiR4R5O)nSiR1R2R3, optionally substituted by ≥1 of alkyl, alkenyl , alkynyl, aryl, aryloxy, aralkyl, aralkoxy, halo, OH, alkoxy, amino, or aminoalkyl; n = 0-1000] (I) are manufactured by reaction				

of the HOCOR6 (R6 same as in I) with R7O(SiR4R5O)nSiR1R2R3 (R1-6, n = same as in I, R7 = H, aralkyl, aryl, **alkenyl**, **alkynyl**, alkyl, optionally substituted by ≥ 1 of R1-5) in the presence of a silaphilic catalyst. A typical I was manufactured by heating Silres SY231 50, HOAc 15, and DMF 5.4 g in 100 mL heptane.

IC ICM C07F007-18

ICS C07F007-04

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 29

ST hydrocarbylsilyl carboxylate manuf; carboxylic acid reaction
hydroxysilane; silyl ether reaction carboxylic acid; DMF catalyst methoxy
polysiloxane reaction acetic acid

IT Silanes

RL: RCT (Reactant); RACT (Reactant or reagent)

(alkoxy; production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic catalysts)

IT Resin acids

RL: IMF (Industrial manufacture); PREP (Preparation)

(dimers, Dymex, reaction products, with methoxy **polysiloxanes**; production of hydrocarbylsilyl carboxylate compds. by reaction of silicon-containing compds. with carboxylic acids in presence of silaphilic catalysts)

IT Rosin

RL: IMF (Industrial manufacture); PREP (Preparation)

(hydrogenated, reaction products, with methyltriethoxysilane; production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic catalysts)

IT **Polysiloxanes**, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(hydroxy, Silres SY300, reaction products, with hydrogenated rosin; production of hydrocarbylsilyl carboxylate compds. by reaction of silicon-containing compds. with carboxylic acids in presence of silaphilic catalysts)

IT **Polysiloxanes**, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(methoxy, Silres SY231, reaction products with acetic acid; production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic catalysts)

IT Esterification catalysts

(production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic catalysts)

IT Amides, uses

Metal alkoxides

Nitriles, uses

RL: CAT (Catalyst use); USES (Uses)

(production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic catalysts)

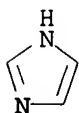
IT Esters, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)

(production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic

- catalysts)
- IT Carboxylic acids, reactions
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic catalysts)
- IT Amines, uses
 RL: CAT (Catalyst use); USES (Uses)
 (rosin alkyl, N-formyl; production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic catalysts)
- IT 60-35-5, Acetamide, uses 67-68-5, DMSO, uses 68-12-2, DMF, uses 75-12-7, Formamide, uses 75-12-7D, Formamide, N-rosoin derivs. 75-50-3, Trimethylamine, uses 80-73-9 100-10-7, p-Dimethylaminobenzaldehyde 108-47-4, 2,4-Dimethylpyridine 110-86-1, Pyridine, uses 124-41-4, Sodium methoxide 288-32-4, Imidazole, uses 429-41-4, Tetrabutylammonium fluoride 591-22-0, 3,5-Dimethylpyridine 616-47-7, N-Methylimidazole 680-31-9, HMPA, uses 694-59-7, Pyridine N-oxide 695-19-2, N-Methyl-4-pyridone 791-28-6, Triphenylphosphine oxide 865-34-9, Lithium methoxide 872-50-4, NMP, uses 1122-58-3, DMAP 1310-65-2, Lithium hydroxide 1739-84-0, 1,2-Dimethylimidazole 2302-39-8, 4,5-Dimethylimidazole 4485-12-5, Lithium stearate 5593-70-4 7226-23-5 7440-31-5D, Tin, organic derivs. 7440-42-8D, Boron, derivs. 7681-49-4, Sodium fluoride, uses 7681-82-5, Sodium iodide, uses 7789-23-3, Potassium fluoride 13400-13-0, Cesium fluoride 53011-66-8, 1,3,5-Triisopropoxycyclotrialuminoxane
 RL: CAT (Catalyst use); USES (Uses)
 (production of hydrocarbylsilyl carboxylate compds. by reaction of hydroxysilanes, **hydroxysiloxanes**, **siloxane** ethers, or silyl ethers with carboxylic acids in presence of silaphilic catalysts)
- IT 64-19-7DP, Acetic acid, reaction products with methoxy **polysiloxanes** 79-10-7DP, Acrylic acid, esters with hydroxy derivs. of **hexasiloxane** 79-41-4DP, Methacrylic acid, esters with hydroxy derivs. of **hexasiloxane** 1929-33-5P, Triphenyl-1-acetoxysilane 2031-67-6DP, Methyltriethoxysilane, reaction products with hydrogenated rosin 2754-27-0P, Trimethyl-1-acetoxysilane 3453-81-4P, Nonamethyl-1-acetoxytetrasiloxane 3560-95-0P, Undecamethyl-1-acetoxypentasiloxane 5290-29-9P, Triethyl-1-acetoxysilane 17315-26-3P, Tripropyl-1-acetoxysilane 17315-27-4P, Triisopropyl-1-acetoxysilane 22192-48-9P 27596-66-3DP, **Hexasiloxane**, (meth)acryloyloxy derivs. 56522-03-3P, Tribenzyl-1-acetoxysilane 72403-64-6P, 3-Acetoxy-1,1,1,3,5,5,5-heptamethyltrisiloxane 74098-43-4P, Tris(trimethylsilyloxy)-1-acetoxysilane 93297-60-0P, Tri-tert-butyl-1-acetoxysilane 144139-44-6P, Tridecamethyl-1-acetoxylhexasiloxane 718614-09-6P, Triisobutyl-1-acetoxysilane 718614-10-9P, Tris(pentyl)-1-acetoxysilane 718614-11-0P, Nonaethyl-1-acetoxytetrasiloxane 718614-12-1P, Nona-tert-butyl-1-acetoxytetrasiloxane 718614-13-2P, Nonabenzyl-1-acetoxytetrasiloxane 718614-14-3P, Nonaisopropyl-1-acetoxytetrasiloxane 718614-15-4P, Nonapropyl-1-acetoxytetrasiloxane 718614-16-5P, Nonaisobutyl-1-acetoxytetrasiloxane 718614-17-6P, Nonakis(pentyl)-1-acetoxytetrasiloxane 718614-18-7P, Nonabutyl-1-acetoxytetrasiloxane 718614-19-8P, Nonakis(dodecyl)-1-acetoxytetrasiloxane 718614-20-1P, Nonakis(hexyl)-1-acetoxytetrasiloxane 718614-21-2P, Nonaphenyl-1-acetoxytetrasiloxane 718614-22-3P,

Nonakis (octyl)-1-acetoxypentasiloxane 718614-23-4P,
 Undecaethyl-1-acetoxypentasiloxane 718614-24-5P,
 Undeca-tert-butyl-1-acetoxypentasiloxane 718614-25-6P,
 Undecabenzyl-1-acetoxypentasiloxane 718614-26-7P,
 Undecaisopropyl-1-acetoxypentasiloxane 718614-27-8P,
 Undecapropyl-1-acetoxypentasiloxane 718614-28-9P,
 Undecaisobutyl-1-acetoxypentasiloxane 718614-29-0P,
 1,1,3,3,5,5,7,7,9,9,9-Undecakis (pentyl)-1-acetoxypentasiloxane
 718614-30-3P, Undecabutyl-1-acetoxypentasiloxane 718614-31-4P,
 1,1,3,3,5,5,7,7,9,9,9-Undecakis (dodecyl)-1-acetoxypentasiloxane
 718614-32-5P, 1,1,3,3,5,5,7,7,9,9,9-Undecakis (hexyl)-1-
 acetoxypentasiloxane 718614-33-6P, Undecaphenyl-1-
 acetoxypentasiloxane 718614-34-7P, 1,1,3,3,5,5,7,7,9,9,9-
 Undecakis (octyl)-1-acetoxypentasiloxane 718614-35-8P,
 Tridecaethyl-1-acetoxihexasiloxane 718614-36-9P,
 Trideca-tert-butyl-1-acetoxihexasiloxane 718614-37-0P,
 Tridecabenzyl-1-acetoxihexasiloxane 718614-38-1P,
 Tridecaisopropyl-1-acetoxihexasiloxane 718614-39-2P,
 Tridecapropyl-1-acetoxihexasiloxane 718614-40-5P,
 Tridecaisobutyl-1-acetoxihexasiloxane 718614-41-6P,
 Tridecapentyl-1-acetoxihexasiloxane 718614-42-7P,
 Tridecabutyl-1-acetoxihexasiloxane 718614-43-8P,
 Tridecadodecyl-1-acetoxihexasiloxane 718614-44-9P,
 Tridecahexyl-1-acetoxihexasiloxane 718614-45-0P,
 Tridecaphenyl-1-acetoxihexasiloxane 718614-46-1P,
 Tridecaoctyl-1-acetoxihexasiloxane 718614-47-2P,
 1-Ethyl-3,3,3-trimethyl-1-trimethylsilyloxy-1-acetoxydisiloxane
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (production of hydrocarbylsilyl carboxylate compds. by reaction of
 hydroxysilanes, hydroxysiloxanes, siloxane ethers,
 or silyl ethers with carboxylic acids in presence of silaphilic
 catalysts)
 IT 7671-19-4 15811-64-0, Methoxytributylsilane
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (production of hydrocarbylsilyl carboxylate compds. by reaction of
 hydroxysilanes, hydroxysiloxanes, siloxane ethers,
 or silyl ethers with carboxylic acids in presence of silaphilic
 catalysts)
 IT 288-32-4, Imidazole, uses
 RL: CAT (Catalyst use); USES (Uses)
 (production of hydrocarbylsilyl carboxylate compds. by reaction of
 hydroxysilanes, hydroxysiloxanes, siloxane ethers,
 or silyl ethers with carboxylic acids in presence of silaphilic
 catalysts)
 RN 288-32-4 HCAPLUS
 CN 1H-Imidazole (9CI) (CA INDEX NAME)

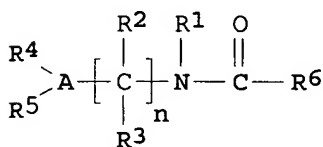


RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

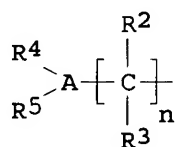
L36 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2004:545716 HCAPLUS
 DN 141:89534

TI Tertiary amino alkyl amide catalysts for improving physical properties of
 polyurethane foams
 IN Burdeniuc, Juan Jesus
 PA Air Products and Chemicals, Inc., USA
 SO Eur. Pat. Appl., 16 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 8

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1435365	A2	20040707	EP 2003-29981	20031230
	EP 1435365	A3	20051123		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 6737446	B1	20040518	US 2003-336555	20030103
	US 2004132847	A1	20040708	US 2003-336371	20030103
	US 6762211	B2	20040713		
	US 6759447	B1	20040706	US 2003-338184	20030106
	US 2004132850	A1	20040708	US 2003-724887	20031202
	US 6835757	B2	20041228		
PRAI	US 2003-336371	A	20030103		
	US 2003-336555	A	20030103		
	US 2003-338184	A	20030106		
	US 2003-724887	A	20031202		
OS	MARPAT 141:89534				
GI					



I



II

AB Polyurethane foam was prepared by treating an organic polyisocyanate and a polyol in the presence of water as a blowing agent, a cell stabilizer, a gelling catalyst, a blowing catalyst, and a tertiary amino alkyl amide catalyst composition I (A = CH, N; R1 = H, II; R2, R3 = H, C1-6 linear or branched alkyl; R4, R5 = C1-6 linear or branched alkyl, C2-5 alkylene; R6 = C5-35 linear or branched alkyl, alkenyl, aryl; n = 1-3). Thus, 83.8 parts 3-dimethylaminopropylamine was reacted with 210 parts acetic acid to form 118 parts N-(3-dimethylaminopropyl)acetamide, which is used as catalyst for producing polyurethane foam.

ICM C08G018-18

ICS C08G018-40; C08J009-00

CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 38

ST polyurethane foam tertiary aminoalkyl amide polymn catalyst

IT Polysiloxanes, uses

RL: MOA (Modifier or additive use); USES (Uses)

(Dabco DC 5043; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)

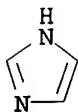
IT Fatty acids, preparation

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)

(coco, reaction products with dimethylaminopropylamine; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane

- foams)
- IT Polyurethanes, preparation
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (foams; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT Amines, uses
 RL: CAT (Catalyst use); USES (Uses)
 (polyamines, nonpolymeric, permethylated or alkoxyated, blowing catalysts; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT Fatty acids, preparation
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (tall-oil, reaction products with dimethylaminopropylamine; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT Blowing agents
 Polymerization catalysts
 (tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT Plastic foams
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT 7732-18-5, Water, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (blowing agent; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT 288-32-4D, Imidazole, complexes with boron 3030-47-5, Pentamethyldiethylenetriamine 3033-62-3, Bisdimethyl aminoethyl ether 7440-42-8D, Boron, complexes with imidazole 83016-70-0, Texacat ZF 10 714959-62-3
 RL: CAT (Catalyst use); USES (Uses)
 (blowing catalyst; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT 319482-44-5P
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (foams; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT 100-76-5, Quinuclidine 123-75-1D, Pyrrolidine, derivs. 280-57-9, 1,4-Diazabicyclo[2.2.2]octane 643-20-9D, Pyrrolizidine, derivs. 497085-84-4, Dabco NE 1060
 RL: CAT (Catalyst use); USES (Uses)
 (gelling catalyst; tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT 64-18-6, Formic acid, reactions 64-19-7, Acetic acid, reactions 109-55-7, 3-Dimethylaminopropylamine 143-07-7, Lauric acid, reactions 149-57-5, 2-Ethylhexanoic acid
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (starting material; preparation of tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)
- IT 109-55-7DP, 3-Dimethylaminopropylamine, reaction products with fatty acids 3179-80-4P 3197-19-1P 5922-69-0P 6325-18-4P
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation); USES (Uses)
 (tertiary amino alkyl amide catalysts for improving phys. properties of polyurethane foams)

IT 288-32-4D, Imidazole, complexes with boron
 RL: CAT (Catalyst use); USES (Uses)
 (blowing catalyst; tertiary amino alkyl amide catalysts for improving
 phys. properties of polyurethane foams)
 RN 288-32-4 HCAPLUS
 CN 1H-Imidazole (9CI) (CA INDEX NAME)



L36 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:446934 HCAPLUS

DN 141:8061

TI Flame retardant **silicone** compositions

IN Tanaka, Miyuki; Sato, Kazuyasu

PA Shin-Etsu Chemical Co., Ltd., Japan

SO Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

applicants

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1424364	A1	20040602	EP 2003-257535	20031128
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	JP 2004182758	A2	20040702	JP 2002-347807	20021129
	US 2004106706	A1	20040603	<u>US 2003-722406</u>	20031128
PRAI	JP 2002-347807	A	20021129		
AB	The silicone compns. comprising (A) an organopolysiloxane having ≥ 1 lower alkenyl group in a mol., (B) an organohydrogenpolysiloxane having ≥ 2 SiH groups in a mol., (C) a platinum catalyst , and (D) ≥ 1 compound selected from among indoline, 1,2,3-triazole, 1,2,4-triazole, imidazole, indazole, benzoxazole, 2-hydroxybenzoxazole, 5-benzoyloxyindole, 1,2-benzisoxazole, 2,1-benzisoxazole, and 1,3-benzodioxole are cured effectively into a transparent rubbery or gel product having flame retardance. Thus, dimethylvinylsilyl-terminated dimethylsiloxane 100, trimethylsilyl-terminated dimethylsilanediol-methylsilanediol copolymer 1.7, chloroplatinic acid/ vinylsiloxane complex 0.25, and benzoxazole 0.005 part were mixed and heat-cured at 150° for 30 min to give a sheet with good flame retardancy.				
IC	ICM C08L083-07				
	ICS C08L083-05; C08K005-1565; C08K005-3417; C08K005-3445; C08K005-3447; C08K005-3472; C08K005-353				
CC	37-6 (Plastics Manufacture and Processing)				
ST	flame retardant silicone compn polysiloxane hydrosilyation benzoxazole				
IT	Polysiloxanes , preparation				
	RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)				
	(crosslinked; flame retardant silicone compns.)				
IT	Cyclosiloxanes				

RL: MSC (Miscellaneous)
(di-Me; flame retardant **silicone** compns.)

IT Fire-resistant materials
Fireproofing agents
Hydrosilylation

(flame retardant **silicone** compns.)

IT 31900-57-9DP, Dimethylsilanediol homopolymer, dimethylvinylsilyl-terminated, hydrosilylation with hydrogen-containing **polysiloxanes**
156118-35-3DP, Dimethylsilanediol-methylsilanediol copolymer, trimethylsilyl or dimethylsilyl-terminated, hydrosilylation with vinyl-containing **siloxanes**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(assumed monomers; flame retardant **silicone** compns.)

IT 59942-04-0DP, Vinyltrimethylsilyl-terminated **dimethylsiloxane**, hydrosilylation with hydrogen-containing **polysiloxanes**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(flame retardant **silicone** compns.)

IT 59-49-4, 2-Hydroxybenzoxazole 95-14-7, 1H-Benzotriazole
271-44-3, Indazole 271-58-9, 2,1-Benzisoxazole
271-95-4, 1,2-Benzisoxazole 274-09-9, 1,3-Benzodioxole
288-32-4, Imidazole, uses 288-88-0, 1H-1,2,4-Triazole
496-15-1, Indoline 1215-59-4, 5-Benzyloxyindole
27070-49-1, 1,2,3-Triazole

RL: MOA (Modifier or additive use); USES (Uses)

(flame retardant; flame retardant **silicone** compns.)

IT 31900-57-9DP, Dimethylsilanediol homopolymer, dimethylvinylsilyl-terminated, hydrosilylation with hydrogen-containing **polysiloxanes**
156118-35-3DP, Dimethylsilanediol-methylsilanediol copolymer, trimethylsilyl or dimethylsilyl-terminated, hydrosilylation with vinyl-containing **siloxanes**

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(assumed monomers; flame retardant **silicone** compns.)

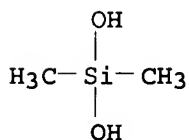
RN 31900-57-9 HCAPLUS

CN Silanediol, dimethyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 1066-42-8

CMF C2 H8 O2 Si

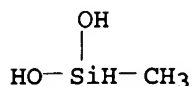


RN 156118-35-3 HCAPLUS

CN Silanediol, dimethyl-, polymer with methylsilanediol (9CI) (CA INDEX NAME)

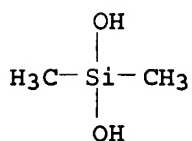
CM 1

CRN 43641-90-3
CMF C H6 O2 Si

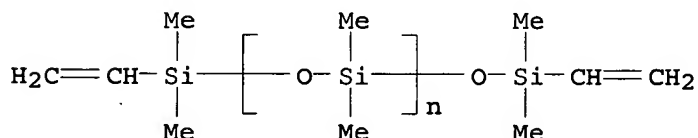


CM 2

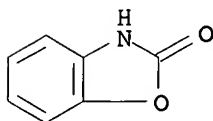
CRN 1066-42-8
CMF C2 H8 O2 Si



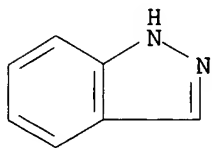
IT 59942-04-0DP, Vinyl dimethylsilyl-terminated dimethylsiloxane, hydrosilylation with hydrohen-containing polysiloxanes
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(flame retardant **silicone** compns.)
RN 59942-04-0 HCAPLUS
CN Poly[oxy(dimethylsilylene)], α -(ethenyldimethylsilyl)- ω -[(ethenyldimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



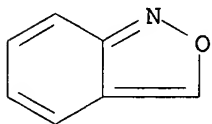
IT 59-49-4, 2-Hydroxybenzoxazole 271-44-3, Indazole 271-58-9, 2,1-Benzisoxazole 271-95-4, 1,2-Benzisoxazole 274-09-9, 1,3-Benzodioxole 288-32-4, Imidazole, uses 496-15-1, Indoline 1215-59-4, 5-Benzyloxyindole
RL: MOA (Modifier or additive use); USES (Uses)
(flame retardant; flame retardant **silicone** compns.)
RN 59-49-4 HCAPLUS
CN 2(3H)-Benzoxazolone (9CI) (CA INDEX NAME)



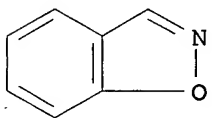
RN 271-44-3 HCAPLUS
CN 1H-Indazole (7CI, 8CI, 9CI) (CA INDEX NAME)



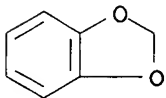
RN 271-58-9 HCAPLUS
CN 2,1-Benzisoxazole (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



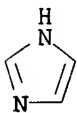
RN 271-95-4 HCAPLUS
CN 1,2-Benzisoxazole (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



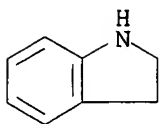
RN 274-09-9 HCAPLUS
CN 1,3-Benzodioxole (9CI) (CA INDEX NAME)



RN 288-32-4 HCAPLUS
CN 1H-Imidazole (9CI) (CA INDEX NAME)

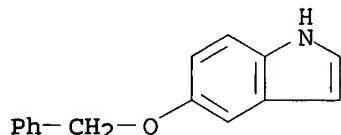


RN 496-15-1 HCAPLUS
CN 1H-Indole, 2,3-dihydro- (9CI) (CA INDEX NAME)



RN 1215-59-4 HCAPLUS

CN 1H-Indole, 5-(phenylmethoxy)- (9CI) (CA INDEX NAME)

L36 ANSWER 8 OF 12¹ HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2002:658762 HCAPLUS

DN 137:186376

TI Hydrophilic curable ethoxylated **silicones**

IN Gosselink, Eugene Paul; Trinh, Toan; Gardner, Robb Richard

PA The Procter & Gamble Co., USA

SO U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002120057	A1	20020829	US 2001-996870	20011115
	US 6649689	B2	20031118		
	WO 2003002809	A1	20030109	WO 2001-US47690	20011114
	W:				
	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ				
	RW:				
	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1334229	A1	20030813	EP 2001-986139	20011114
	R:				
	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004521993	T2	20040722	JP 2003-508768	20011114
PRAI	US 2000-249234P	P	20001116		
	WO 2001-US47690	W	20011114		
AB	Hydrophilic curable alkoxyated silicone polymers (for surface modification) are useful in, e.g., fiber and fabric care, hair care, skin care, surface care, and car care compns. The compds. are curable silicone polymers which contain ≥1 polyalkyleneoxy groups, preferably polyalkyleneoxy pendant groups, comprising at least some ethyleneoxy units, the polyalkyleneoxy pendant groups are preferably capped with low mol. weight alkyl groups, such as C1-6-alkyl. These compds. are substantive to the surface but keep the surface hydrophilic. A				

polyethylene glycol allyl Me ether intermediate was reacted with Me terminated **methylhydrosiloxane-dimethylsiloxane** copolymer in the presence of **Pt catalyst**, subsequently N-allylethylenediamine and vinylmethyldimethoxysilane to give curable **silicone** with amine, Me ethoxylate, and SiOMe functionality.

IC ICM C08J003-00

INCL 524588000

CC 37-3 (Plastics Manufacture and Processing)

ST polyoxyalkylene **polysiloxane** manuf

IT Fabric finishing

(agents; hydrophilic curable ethoxylated **silicones** for)

IT **Polysiloxanes**, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyoxyalkylene-; hydrophilic curable ethoxylated **silicones** and intermediate functional ethoxylates)

IT Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(**polysiloxane**-; hydrophilic curable ethoxylated **silicones** and intermediate functional ethoxylates)

IT Hair preparations

(sprays; hydrophilic curable ethoxylated **silicones** for)

IT 107-05-1DP, Allyl chloride, reaction products with imidazole, functional ethoxylates, and reactive **siloxanes** 288-32-4DP, Imidazole, reaction products with allyl chloride, functional ethoxylates, and reactive **siloxanes** 556-67-2DP, **Octamethylcyclotetrasiloxane**, reaction products with functional ethoxylates and reactive **siloxanes** 919-30-2DP, Aminopropyltriethoxysilane, reaction products with reactive **siloxanes** and functional ethoxylates 2155-94-4DP, Dimethylallylamine, reaction products with functional ethoxylates and reactive **siloxanes** 2944-70-9DP, reaction products with functional ethoxylates and reactive **siloxanes** 16753-62-1DP, Vinylmethyldimethoxysilane, reaction products with functional ethoxylates and reactive **siloxanes** 26403-72-5DP, Polyethylene glycol diglycidyl ether, reaction products with reactive **siloxanes**, acetate salt 31692-79-2DP, Hydroxy-terminated **polydimethylsiloxane**, reaction products with functional ethoxylates 156118-35-3DP, Dimethylsilanediol-methylsilanediol copolymer, Me-terminated, reaction products with functional ethoxylates 192518-56-2DP, reaction products with functional ethoxylates and reactive **siloxanes**

RL: IMF (Industrial manufacture); PREP (Preparation)

(component of fabric care and personal care agents; hydrophilic curable ethoxylated **silicones** and intermediate functional ethoxylates)

IT 9041-33-2P, Ethylene oxide-propylene oxide copolymer monoallyl ether

27252-80-8P, Polyethylene glycol allyl methyl ether 27274-31-3P,

Polyethylene glycol monoallyl ether 52002-43-4P **97969-60-3P**

147962-80-9P **189240-06-0P** **362060-08-0P** 449754-21-6P

449754-22-7P 449754-23-8P 449754-24-9P 449754-25-0P

449754-26-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate for adduction with reactive **siloxanes**; hydrophilic curable ethoxylated **silicones** and intermediate functional ethoxylates)

IT 115254-29-0DP, Dimethylsilyl-terminated

polydimethylsiloxane, reaction products with allyl chloride and

imidazole

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(intermediate; hydrophilic curable ethoxylated **silicones** and intermediate functional ethoxylates)

IT 2370-88-9, 1,3,5,7-Tetramethylcyclotetrasiloxane

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction with allylethylenediamine; hydrophilic curable ethoxylated **silicones** and intermediate functional ethoxylates)

IT 40510-22-3

RL: RCT (Reactant); RACT (Reactant or reagent)

(reaction with **tetramethylcyclotetrasiloxane**; hydrophilic curable ethoxylated **silicones** and intermediate functional ethoxylates)

IT 288-32-4DP, Imidazole, reaction products with allyl chloride, functional ethoxylates, and reactive **siloxanes**

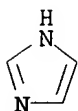
31692-79-2DP, Hydroxy-terminated **polydimethylsiloxane**, reaction products with functional ethoxylates 156118-35-3DP, Dimethylsilanediol-methylsilanediol copolymer, Me-terminated, reaction products with functional ethoxylates 192518-56-2DP, reaction products with functional ethoxylates and reactive **siloxanes**

RL: IMF (Industrial manufacture); PREP (Preparation)

(component of fabric care and personal care agents; hydrophilic curable ethoxylated **silicones** and intermediate functional ethoxylates)

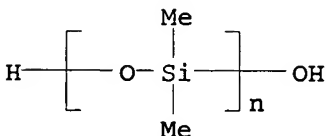
RN 288-32-4 HCAPLUS

CN 1H-Imidazole (9CI) (CA INDEX NAME)



RN 31692-79-2 HCAPLUS

CN Poly[oxy(dimethylsilylene)], α -hydro- ω -hydroxy- (8CI, 9CI) (CA INDEX NAME)



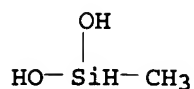
RN 156118-35-3 HCAPLUS

CN Silanediol, dimethyl-, polymer with methylsilanediol (9CI) (CA INDEX NAME)

CM 1

CRN 43641-90-3

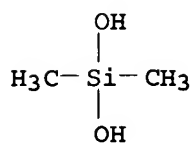
CMF C H6 O2 Si



CM 2

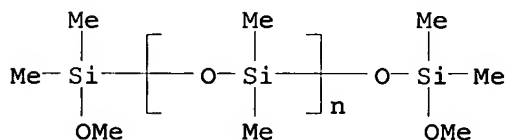
CRN 1066-42-8

CMF C2 H8 O2 Si



RN 192518-56-2 HCAPLUS

CN Poly[oxy(dimethylsilylene)], α -(methoxydimethylsilyl)- ω -
[(methoxydimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



IT 97969-60-3P 189240-06-0P 362060-08-0P

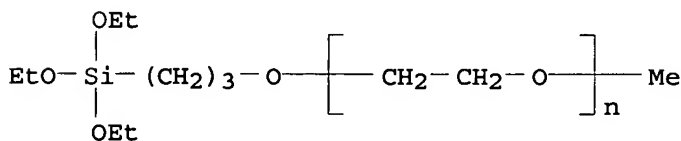
449754-26-1P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
(Reactant or reagent)

(intermediate for addition with reactive **siloxanes**;
hydrophilic curable ethoxylated **silicones** and intermediate
functional ethoxylates)

RN 97969-60-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -methyl- ω -[3-
(triethoxysilyl)propoxy]- (9CI) (CA INDEX NAME)



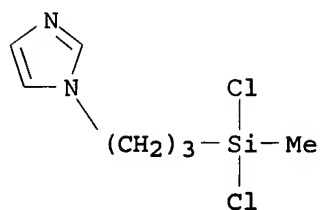
RN 189240-06-0 HCAPLUS

CN 1H-Imidazole, 1-[3-(dichloromethylsilyl)propyl]-, monohydrochloride,
homopolymer, hydrolytic (9CI) (CA INDEX NAME)

CM 1

CRN 189239-73-4

CMF C7 H12 Cl2 N2 Si . Cl H



● HCl

CM 2

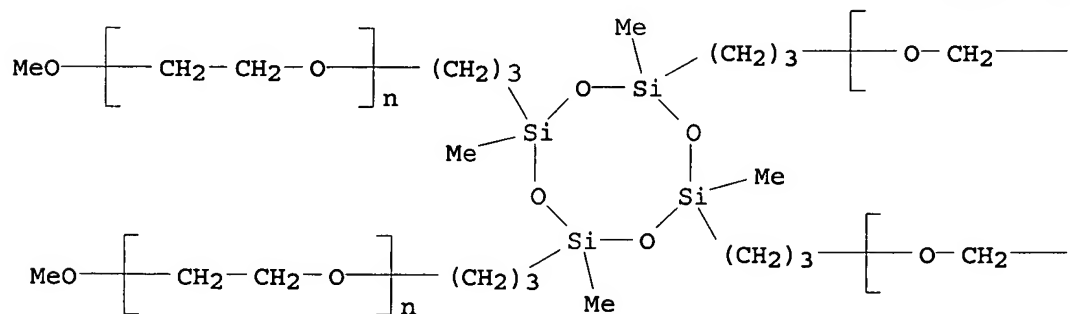
CRN 7732-18-5

$$\text{CMF} \quad \text{H}_2 \quad \text{O}$$
 H_2O

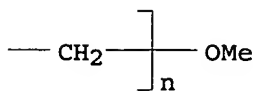
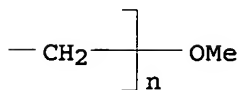
RN 362060-08-0 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), $\alpha, \alpha', \alpha'', \alpha'''$ -[(2,4,6,8-tetramethylcyclotetrasiloxane-2,4,6,8-tetrayl)tetra-3,1-propanediyl]tetrakis[ω -methoxy- (9CI) (CA INDEX NAME)]

PAGE 1-A



PAGE 1-B

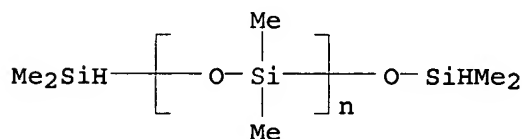


RN 449754-26-1 HCAPLUS
 CN Poly(oxy-1,2-ethanediyl), $\alpha, \alpha', \alpha'', \alpha''', \alpha''''$
 $', \alpha''''', \alpha''''''', \alpha'''''''' - [(2,4,6,8-$
 tetramethylcyclotetrasiloxane-2,4,6,8-tetrayl)tetrakis(3,1-
 propanediynitrilodi-2,1-ethanediyl)]octakis[ω -methoxy- (9CI) (CA
 INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT 115254-29-0DP, Dimethylsilyl-terminated
 polydimethylsiloxane, reaction products with allyl chloride and
 imidazole
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT
 (Reactant or reagent)
 (intermediate; hydrophilic curable ethoxylated silicones and
 intermediate functional ethoxylates)

RN 115254-29-0 HCAPLUS
 CN Poly[oxy(dimethylsilylene)], α -(dimethylsilyl)- ω -
 [(dimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



L36 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1999:726608 HCAPLUS
 DN 132:64592
 TI Synthesis and Photoimaging Study of a New Poly(methacrylate) with Tethered
 Silacyclobutane Moiety
 AU Wu, Xiaosong; Grinevich, Oleg; Neckers, Douglas C.
 CS Center for Photochemical Sciences, Bowling Green State University, Bowling
 Green, OH, 43403, USA
 SO Chemistry of Materials (1999), 11(12), 3687-3692
 CODEN: CMATEX; ISSN: 0897-4756
 PB American Chemical Society
 DT Journal
 LA English
 AB A methacrylate with a tethered silacyclobutane moiety,
 6-(methylcyclotrimethylenesilyl)hexyl methacrylate, was synthesized.
 Radical polymerization (thermal) yielded a linear poly(methacrylate) without
 affecting the silicon-containing four-membered ring. Photoactivated
 ring-opening polymerization of the silacyclobutane functionality was employed
 to crosslink the polymer thin film, yielding, after development, a neg.
 photoimage. Evidence of solid-state ring-opening polymerization was provided
 by IR spectroscopy. Postbaking was important. With 0.1% molar Pt(acac)₂
 with respect to monomer, the system exhibited Dc [min. exposure dose] of
 900 mJ/cm².
 CC 35-7 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 36, 74
 ST methacrylate silacyclobutane prepn ring opening polymn photoimage;
 photoimage polysilane methacrylate platinum catalyzed ring opening polymn
 IT Negative photoresists
 Photoimaging
 (neg. photoresist based on ring opening and post-backing of

methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT Polycarbosilanes
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT Crosslinking
 (photochem., ring-opening; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT Polymerization
 (radical; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT Polymerization
 (ring-opening; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT 15170-57-7, Bis(acetylacetonato)platinum
 RL: CAT (Catalyst use); USES (Uses)
 (ROMP - photocrosslinking catalyst; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT 71-43-2, Benzene, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (image developer; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT 106-93-4, 1,2-Dibromoethane
 RL: CAT (Catalyst use); USES (Uses)
 (initiator; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT 59431-24-2P, 6-Chlorohexyl tert-Butyldimethylsilyl Ether 180424-57-1P, 6-(Methylcyclotrimethylenesilyl)-1-hexanol 253304-28-8P, 6-(Methylcyclotrimethylenesilyl)hexyl tert-Butyldimethylsilyl Ether
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (intermediate; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT 253304-30-2P, 6-(Methylcyclotrimethylenesilyl)hexyl methacrylate
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (monomer; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

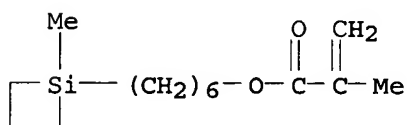
IT 2009-83-8, 6-Chloro-1-hexanol
 RL: NUU (Other use, unclassified); USES (Uses)
 (neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT 25722-25-2DP, 1,1,3,3-Tetramethyl-1,3-disilacyclobutane homopolymer, SRU, methacrylate-tethered 30029-85-7DP, 1,1,3,3-Tetramethyl-1,3-disilacyclobutane homopolymer, methacrylate-tethered
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
 (neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

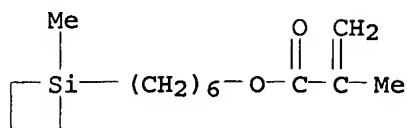
IT 920-46-7, Methacryloyl chloride 2351-34-0 18162-48-6, tert-Butyldimethylsilyl chloride
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

IT 253304-31-3DP, 6-(Methylcyclotrimethylenesilyl)hexyl methacrylate polymer, photocrosslinking ring-opening products 253304-31-3P,

6-(Methylcyclotrimethylenesilyl)hexyl methacrylate polymer
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (neg. photoresist based on ring opening and post-backing of
 methacrylate-tethered poly(silacyclobutane) for photoimaging)
 IT 1321-74-0D, Divinylbenzene, poly(styrenesulfonic acid) crosslinked
 11119-67-8, Dowex 50W-X8 50851-57-5D, Poly(styrenesulfonic acid),
 divinylbenzene-crosslinked
 RL: NUU (Other use, unclassified); USES (Uses)
 (protective group ion exchanger; neg. photoresist based on ring opening
 and post-backing of methacrylate-tethered poly(silacyclobutane) for
 photoimaging)
 IT 78-67-1, AIBN
 RL: CAT (Catalyst use); USES (Uses)
 (radical polymerization catalyst; neg. photoresist based on ring opening and
 post-backing of methacrylate-tethered poly(silacyclobutane) for
 photoimaging)
 IT 288-32-4, Imidazole, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (reaction medium; neg. photoresist based on ring opening and
 post-backing of methacrylate-tethered poly(silacyclobutane) for
 photoimaging)
 IT 60-29-7, Diethyl ether, uses 7439-95-4, Magnesium, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (silylation reagent; neg. photoresist based on ring opening and
 post-backing of methacrylate-tethered poly(silacyclobutane) for
 photoimaging)
 IT 253304-31-3DP, 6-(Methylcyclotrimethylenesilyl)hexyl methacrylate
 polymer, photocrosslinking ring-opening products 253304-31-3P,
 6-(Methylcyclotrimethylenesilyl)hexyl methacrylate polymer
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (neg. photoresist based on ring opening and post-backing of
 methacrylate-tethered poly(silacyclobutane) for photoimaging)
 RN 253304-31-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 6-(1-methylsilacyclobut-1-yl)hexyl ester,
 homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 253304-30-2
 CMF C14 H26 O2 Si



RN 253304-31-3 HCAPLUS
 CN 2-Propenoic acid, 2-methyl-, 6-(1-methylsilacyclobut-1-yl)hexyl ester,
 homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 253304-30-2
 CMF C14 H26 O2 Si



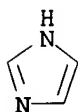
IT 288-32-4, Imidazole, uses

RL: NUU (Other use, unclassified); USES (Uses)

(reaction medium; neg. photoresist based on ring opening and post-backing of methacrylate-tethered poly(silacyclobutane) for photoimaging)

RN 288-32-4 HCAPLUS

CN 1H-Imidazole (9CI) (CA INDEX NAME)



RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1997:44527 HCAPLUS

DN 126:75330

TI **Bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compositions

IN Futaesaku, Norio; Washimori, Akiko; Kudo, Masaaki; Fukuda, Hideo; Maruyama, Isao

PA Maruzen Oil Co Ltd, Japan

SO Jpn. Kokai Tokkyo Koho, 23 pp.

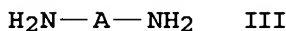
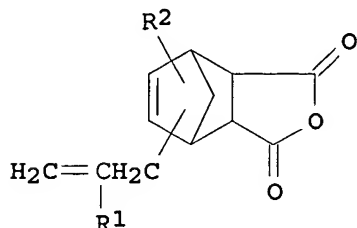
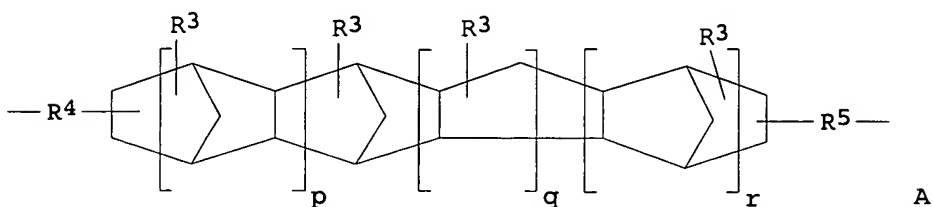
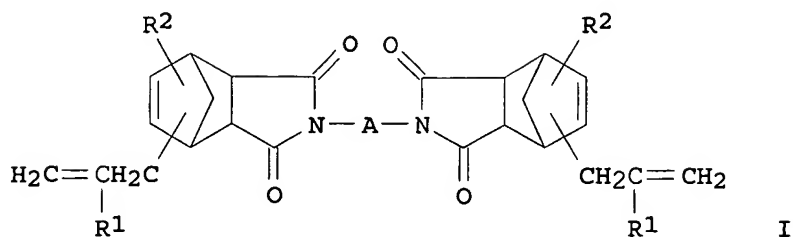
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	JP 08277265	A2	19961022	JP 1995-104880	19950404
PRAI	JP 1995-104880		19950404		
OS	MARPAT 126:75330				
GI					



AB **Bisalkenyl**-substituted nadimide I is synthesized by the reaction of nadic anhydride derivative II with diamine III (R₁, R₂ = H, Me; R₃ = H, halogen, Me; R₄, R₅ = C₁-4 alkylene; p, r = 0-3; q = 0, 1). Thermosetting compns. with good dielec. property, water absorbance, and transparency are made from nadimide I and other components selected from maleimide compds., **alkenyl**-substituted nadimide compds., epoxy resins, phenolic resins, vinylbenzyl compds., vinyl compds., cyclic olefins, functional group-containing conjugated dienes, and unsatd. polyester resins. The thermosetting resins may also contain **silicone** resins, modified **silicone** resins, polysulfone resins, polyphenylene sulfides, and fluoropolymers.

IC ICM C07D209-76

ICS C08F022-40; C08F026-06; C08K005-3417; C08L101-00

CC 35-2 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 27, 37, 42

ST nadimide thermosetting resin manuf

IT **Polysiloxanes**, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(Me Ph, coating composition; **bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)

IT Fluoropolymers, uses

Polysulfones, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(coating composition; **bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)

IT **Polysiloxanes**, uses

Polysiloxanes, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or

- engineered material use); USES (Uses)
(epoxy, coating composition; **bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)
- IT Butadiene rubber, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(epoxy-terminated, polymers with **bisalkenyl**-substituted nadimides; **bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)
- IT Polysiloxanes, uses
Polysiloxanes, uses
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(polyester-; **bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)
- IT Epoxy resins, uses
Epoxy resins, uses
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(**polysiloxane**-, coating composition; **bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)
- IT Polyesters, uses
Polyesters, uses
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(**polysiloxane**-, **bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)
- IT Plastics, preparation
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(thermosetting, transparent; **bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)
- IT 75-91-2 77-78-1, Dimethyl sulfate 80-15-9, Cumene hydroperoxide 80-43-3, Dicumyl peroxide 88-61-9 104-15-4, p-Toluenesulfonic acid, uses 119-53-9, Benzoin 121-69-7, N,N-Dimethylaniline, uses 288-32-4, Imidazole, uses 313-39-3, Diphenyliodonium tetrafluoroborate 592-39-2 670-96-2, 2-Phenylimidazole 693-98-1, 2-Methylimidazole 1931-62-0, tert-Butylperoxy maleate 13476-99-8 14024-18-1, Iron acetylacetonate 14284-89-0, Manganese acetylacetonate 15653-01-7, Cerium acetylacetonate 18715-41-8, Pyridine sulfate (2:1) 24057-28-1, Pyridine, p-toluenesulfonate 33943-20-3, Di-tert-butylperoxy isophthalate 58109-40-3, Diphenyliodonium hexafluorophosphate 75007-13-5, Diphenyliodonium perchlorate
RL: CAT (Catalyst use); USES (Uses)
(**bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)
- IT 185139-73-5P 185139-74-6P
RL: IMF (Industrial manufacture); PRP (Properties); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(**bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)
- IT 185139-73-5DP, polymers with epoxy-modified polybutadiene rubber 185139-75-7P 185139-76-8P 185139-77-9P 185139-78-0P 185139-79-1P 185139-81-5P 185139-83-7P 185139-85-9P 185139-86-0P 185139-88-2P 185230-81-3P 185230-82-4P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(**bisalkenyl**-substituted nadimides, their manufacture, and their thermosetting compns.)

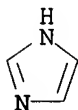
IT 2916-26-9, 2,5-Bis(aminomethyl)-bicyclo[2.2.1]heptane 134379-62-7
142280-46-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(bisalkenyl-substituted nadimides, their manufacture, and their
thermosetting compns.)

IT 9003-17-2P
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
engineered material use); PREP (Preparation); USES (Uses)
(butadiene rubber, epoxy-terminated, polymers with bisalkenyl
-substituted nadimides; bisalkenyl-substituted nadimides,
their manufacture, and their thermosetting compns.)

IT 9002-84-0, PTFE
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or
engineered material use); USES (Uses)
(coating composition; bisalkenyl-substituted nadimides, their
manufacture, and their thermosetting compns.)

IT 288-32-4, Imidazole, uses
RL: CAT (Catalyst use); USES (Uses)
(bisalkenyl-substituted nadimides, their manufacture, and their
thermosetting compns.)

RN 288-32-4 HCAPLUS
CN 1H-Imidazole (9CI) (CA INDEX NAME)



L36 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1995:283229 HCAPLUS
DN 122:57481
TI Heat-curable siloxane compositions, preformed latent
platinum catalysts, and methods for making
IN Sumpter, Chris A.; Lewis, Larry N.; Lawrence, William B.
PA General Electric Co., USA
SO U.S., 10 pp. Cont.-in-part of U.S. Ser. No. 800,311, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5331075	A	19940719	US 1992-955987	19921013
	CA 2080153	AA	19930530	CA 1992-2080153	19921008
	JP 05295269	A2	19931109	JP 1992-309859	19921119
	EP 545591	A1	19930609	EP 1992-310612	19921120
	EP 545591	B1	19970205		
	R: BE, DE, FR, GB, IT				
	US 5432140	A	19950711	US 1993-154420	19931119
PRAI	US 1991-800311	B2	19911129		
	US 1992-955987	A	19921013		

AB A heat-curable siloxane composition which resists substantial
increase in viscosity for at least a five day accelerated aging period at
50° comprises (A) vinyl organopolysiloxane fluid (B)
silicon hydride siloxane, and (C) an amount of a preformed latent
platinum catalyst which is effective for catalyzing
addition between (A) and (B), where the preformed latent platinum

catalyst is made by effecting reaction in the substantial absence of (A) or (B) or mixture thereof, between a zero valent **platinum catalyst** complex and 1.0 to 60 mol of an organic nitrogen compound per mol of Pt. The organic nitrogen compound is selected from 2,2'-bipyridine, diazodicarboxylate, diisopropylazodicarboxylate, 4-phenyl-1,2,4-triazoline-3,5-dione, azobistoluoyl, azobisbenzoyl, azobis(N,N'-dimethylformamide), 4-methyl-1,2,4-triazoline-3,5-dione, 1,10-phenanthroline, di-t-Bu azodicarboxylate, neocuproine, dibenzyl azodicarboxylate, phthalazine, quinazoline, quinoxaline, 4,4'-dipyridyl, 3,3'-dipyridyl, 2,4'-dipyridyl, benzimidazole, indazole, dipyridyl ketone, 2,2':6',2-terpyridine and 4,4'-trimethylene dipyridine.

IC ICM C08G077-08

INCL 528015000

CC 37-6 (Plastics Manufacture and Processing)

ST zerovalent **platinum** complex crosslinking **catalyst**;
nitrogen compd **platinum** complex **catalyst**

IT Crosslinking catalysts

(heat-curable **siloxane** compns. containing preformed latent **platinum catalysts**)

IT **Siloxanes** and **Silicones**, uses

RL: POF (Polymer in formulation); USES (Uses)

(hydrogen, heat-curable **siloxane** compns. containing preformed latent **platinum catalysts**)

IT **Siloxanes** and **Silicones**, uses

RL: POF (Polymer in formulation); USES (Uses)

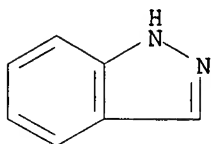
(vinyl group-containing, heat-curable **siloxane** compns. containing preformed latent **platinum catalysts**)

IT 51-17-2D, Benzimidazole, reaction products with zero-valent platinum complexes 66-71-7D, 1,10-Phenanthroline, reaction products with zero-valent platinum complexes 91-19-0D, Quinoxaline, reaction products with zero-valent platinum complexes 253-52-1D, Phthalazine, reaction products with zero-valent platinum complexes 253-82-7D, Quinazoline, reaction products with zero-valent platinum complexes 271-44-3D, Indazole, reaction products with zero-valent platinum complexes 366-18-7D, 2,2'-Bipyridine, reaction products with zero-valent platinum complexes 484-11-7D, Neocuproine, reaction products with zero-valent platinum complexes 553-26-4D, 4,4'-Dipyridyl, reaction products with zero-valent platinum complexes 581-46-4D, 3,3'-Dipyridyl, reaction products with zero-valent platinum complexes 581-47-5D, 2,4'-Dipyridyl, reaction products with zero-valent platinum complexes 870-50-8D, Di-tert-butyl azodicarboxylate, reaction products with zero-valent platinum complexes 959-31-9D, reaction products with zero-valent platinum complexes 1148-79-4D, 2,2':6',2-Terpyridine, reaction products with zero-valent platinum complexes 1972-28-7D, reaction products with zero-valent platinum complexes 2446-83-5D, Diisopropylazodicarboxylate, reaction products with zero-valent platinum complexes 2449-05-0D, Dibenzyl azodicarboxylate, reaction products with zero-valent platinum complexes 2627-95-4D, reaction products with chloroplatinic acid and organic nitrogen compds. 4233-33-4D, 4-Phenyl-1,2,4-triazoline-3,5-dione, reaction products with zero-valent platinum complexes 10465-78-8D, reaction products with zero-valent platinum complexes 13274-43-6D, 4-Methyl-1,2,4-triazoline-3,5-dione, reaction products with zero-valent platinum complexes 16941-12-1D, Chloroplatinic acid, reaction products with sym-tetramethyldivinylidisiloxane and organic nitrogen compds. 17252-51-6D, 4,4'-Trimethylene dipyridine, reaction products with zero-valent platinum complexes 53612-39-8D, reaction products with zero-valent platinum complexes 144817-18-5D, Azobistoluoyl, reaction products with zero-valent platinum complexes

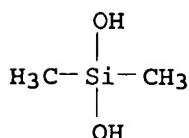
RL: CAT (Catalyst use); USES (Uses)

(heat-curable **siloxane** compns. containing preformed latent

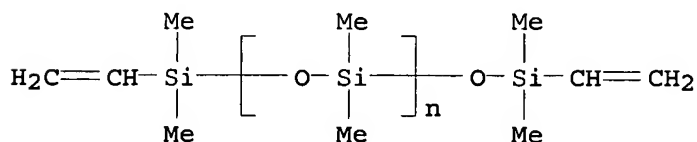
platinum catalysts)
 IT 31900-57-9D, Dimethylsilanediol homopolymer, vinyl-terminated
 59942-04-0
 RL: POF (Polymer in formulation); USES (Uses)
 (heat-curable siloxane compns. containing preformed latent
 platinum catalysts)
 IT 271-44-3D, Indazole, reaction products with zero-valent platinum
 complexes
 RL: CAT (Catalyst use); USES (Uses)
 (heat-curable siloxane compns. containing preformed latent
 platinum catalysts)
 RN 271-44-3 HCAPLUS
 CN 1H-Indazole (7CI, 8CI, 9CI) (CA INDEX NAME)



IT 31900-57-9D, Dimethylsilanediol homopolymer, vinyl-terminated
 59942-04-0
 RL: POF (Polymer in formulation); USES (Uses)
 (heat-curable siloxane compns. containing preformed latent
 platinum catalysts)
 RN 31900-57-9 HCAPLUS
 CN Silanediol, dimethyl-, homopolymer (9CI) (CA INDEX NAME)
 CM 1
 CRN 1066-42-8
 CMF C2 H8 O2 Si



RN 59942-04-0 HCAPLUS
 CN Poly[oxy(dimethylsilylene)], α -(ethenyldimethylsilyl)- ω -
 [(ethenyldimethylsilyl)oxy]- (9CI) (CA INDEX NAME)



L36 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 1983:180051 HCAPLUS
 DN 98:180051
 TI Platinum-, rhodium-, and iridium-nitrogen complex

catalysts

IN Palensky, Frederick J.; Siedle, Allen R.
 PA Minnesota Mining and Manufacturing Co., USA
 SO Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 61241	A1	19820929	EP 1982-300990	19820225
	EP 61241	B1	19851106		
	R: DE, FR, GB, IT, NL				
	US 4414376	A	19831108	US 1981-246104	19810320
	JP 57176994	A2	19821030	JP 1982-44447	19820319
	JP 05060982	B4	19930903		
	US 4511715	A	19850416	US 1982-402231	19820727
	US 4549018	A	19851022	US 1983-522472	19830811
	US 4588800	A	19860513	US 1985-689184	19850107
PRAI	US 1981-245927	A	19810320		
	US 1981-246104	A	19810320		
	US 1982-402231	A3	19820727		

AB Monometallic, bimetallic, ionic, and reduced forms of Pt-, Rh-, and Ir-heterocyclic N complexes are hydrosilylation catalysts for production of silanes and siloxanes. Thus, a mixture of 25 mL HSiCl₃, 8.1 g 1-methylcyclohexane [108-87-2], and 0.055 g (phenazine)PtCl₂C₂H₄ [78713-13-0] was stirred 6 days under N to give, on distillation, 2.2 g trichlorosilylmethylcyclohexane [18388-16-4].

IC C07F015-00; C08G077-00; C08L083-00

CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 27

ST **platinum** hydrosilylation catalyst **siloxane**;
 rhodium hydrosilylation catalyst; iridium hydrosilylation catalyst;
 phenazine hydrosilylation catalyst

IT **Siloxanes and Silicones**, preparation

RL: IMF (Industrial manufacture); PREP (Preparation)
 (manufacture of, hydrosilylation catalysts for)

IT Hydrosilylation catalysts

(**platinum**, rhodium, and iridium-heterocyclic nitrogen complexes)

IT	78713-13-0	84605-55-0	84605-56-1	84605-57-2	84605-58-3
	84605-59-4	84605-60-7	84605-61-8	84605-62-9	84605-62-9D, dimers
	84605-63-0	84605-64-1	84605-65-2	84605-66-3	84605-67-4
	84605-68-5	84605-69-6	84625-83-2	84709-15-9	84709-16-0

RL: CAT (Catalyst use); USES (Uses)

(hydrosilylation catalysts, for manufacture of silanes and **siloxanes**)

IT 108-87-2

RL: RCT (Reactant); RACT (Reactant or reagent)
 (hydrosilylation of, catalysts for)

IT 18388-16-4P

RL: PREP (Preparation)
 (preparation of)

IT 12012-50-9 12092-47-6 12112-67-3

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with phenazine)

IT 603-35-0, reactions 2923-28-6

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with phenazine platinum dichloroethylene)

IT 92-82-0

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with potassium platinum chloroethylene)

IT 288-32-4, reactions 288-88-0

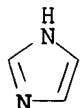
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with potassium platinum trichloroethylene)

IT 288-32-4, reactions

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with potassium platinum trichloroethylene)

RN 288-32-4 HCAPLUS

CN 1H-Imidazole (9CI) (CA INDEX NAME)



=>